

In the claims:

Claims 1-27 (Cancelled)

28. (Added) A stent, comprising:

a helical structure having a plurality of coils, said structure having a longitudinal axis and said coils having a pitch, said structure having an internal longitudinal passage wherein said structure is made from a filament having a cross-section and an outer surface, said filament comprising:

a soft flexible elongated member having an outer surface; and

a bioabsorbable or biodegradable polymeric outer coating on the outer surface of the member;

wherein, the polymeric coating has sufficient mechanical integrity to effectively maintain the flexible member in a helical configuration, until the coating has sufficiently been degraded or absorbed in vivo to effectively convert the helical structure back into a soft, elongated member, wherein the coating comprises a polymer selected from the group consisting of polyacrylamides, polyethylene glycols, polyethylene oxide, vinyl alcohols, poly(N-vinyl pyrrolidone)s and polymers made from monomers selected from the group consisting of lactide, glycolide, para-dioxanone, caprolactone, and trimethylene carbonate, caprolactone, blends thereof and copolymers thereof.

29. (Added) The stent of claim 28 wherein the coating comprises a melt polymer.

30. (Added) The stent of claim 28 wherein the coating comprises a solution polymer.

31. (Added) The stent of claim 28 wherein the filament comprises a surgical suture.

32. (Added) The stent of claim 31 wherein the suture comprises a monofilament.

33. (Added) The stent of claim 31, wherein the suture comprises a multifilament.

34. (Added) The stent of claim 31 wherein the suture comprises a non-absorbable suture.

35. (Added) The stent of claim 31 wherein the suture comprises an absorbable suture.

36. (Added) The stent of claim 28 wherein the polymer of the coating has a glass transition temperature above 55°C.

37. (Added) The stent of claim 28 wherein the polymer of the coating has a glass transition temperature above 120°C.

38. (Added) The stent of claim 28 wherein the polymeric coating additionally comprises polyamide.

39. (Added) A biodegradable filament, the filament comprising:  
an elongated, flexible member having a cross-section, and an outer surface; and,  
a polymeric coating on said outer surface, said coating comprising a biodegradable or bioabsorbable polymer,  
wherein, the polymeric coating has sufficient mechanical integrity to effectively maintain the flexible member in a substantially fixed configuration, until the coating has sufficiently been degraded or absorbed in vivo to effectively convert the structure back into a soft, elongated member, wherein the coating comprises a polymer selected from the group consisting of polyacrylamides, polyethylene glycols, polyethylene oxide, vinyl alcohols, poly(N-vinyl pyrrolidones) and polymers made from monomers selected from the group consisting of lactide, glycolide, para-dioxanone, caprolactone, and trimethylene carbonate, caprolactone, blends thereof and copolymers thereof.

40. (Added) The filament of claim 39 wherein the coating comprises a melt polymer.

41. (Added) The filament of claim 39 wherein the coating comprises a solution polymer.

42. (Added) The filament of claim 39 wherein the filament comprises a surgical suture.

43. (Added) The filament of claim 42 wherein the suture comprises a monofilament.

49. (Added) The filament of claim 42 wherein the suture comprises a multifilament.

50. (Added) The filament of claim 42 wherein the suture comprises a non-absorbable suture.

51. (Added) The filament of claim 42 wherein the suture comprises an absorbable suture.

52. (Added) The filament of claim 39 wherein the polymer of the coating has a glass transition temperature above 55°C.

53. (Added) The filament of claim 1 wherein the polymer of the coating has a glass transition temperature above 120°C.

54. (Added) The filament of claim 1 wherein the polymeric coating additionally comprises polyamide.

55. (Added) A method of maintaining a passageway of a body lumen substantially open, comprising the steps of:  
providing a stent, said stent comprising:

a helical structure having a plurality of coils, said structure having a longitudinal axis and a longitudinal passage, and said coils having a pitch, wherein said structure is made from a fiber, said fiber having a cross-section and said filament comprising:

an elongated flexible, filament member, having an external surface and a cross-section; and,

a polymeric outer coating on the surface of the member,  
wherein, the polymeric coating has sufficient mechanical integrity to effectively maintain the flexible member in a helical configuration, wherein the coating comprises a polymer selected from the group consisting of polyacrylamides, polyethylene glycols, polyethylene oxide, vinyl alcohols, poly(N-vinyl pyrrolidone)s and polymers made from monomers selected from the group consisting of lactide, glycolide, para-dioxanone, caprolactone, and trimethylene carbonate, caprolactone, blends thereof and copolymers thereof; and,

implanting said stent in a body lumen and maintaining the stent in the body lumen for a sufficient period of time to effectively maintain the passageway of the lumen

substantially open for a desired period of time until the exterior coating softens, thereby converting the stent structure into a soft, flexible filamentary structure.